AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (currently amended) A combination of an impression cap and a dental implant comprising:

a dental implant having a longitudinal axis and a circumferential collar with an outermost diameter; and

an impression cap comprising:

an elongated body having ~~a longitudinal axis,~~ a first end and a second end, at least the second end being provided with an opening, the opening extending longitudinally into the body from the second end forming an inner cavity;

a press fit mechanism comprising a press fit surface formed ~~in~~ near the second end of the body for squeezing against said outer circumferential collar of said dental implant to form a press fit connection between the dental implant and the impression cap, said press fit surface being an internal surface with an internal side wall ~~generally parallel to the longitudinal axis of the dental implant and~~ in engagement with ~~sad~~ said circumferential collar at its outermost diameter when the impression cap and the dental implant are in said press fit connection, said internal side wall being substantially parallel to said longitudinal axis of the dental implant at the point of engagement between said internal side wall and said circumferential collar and said internal side wall extending in a direction substantially parallel to said longitudinal axis of the dental implant from said point of engagement toward said second end.

2. (currently amended) ~~An impression cap~~ The combination according to claim 1, wherein said circumferential collar includes an outer, upper shoulder and said impression cap includes an inner circumferential angled surface ~~located as the second end of the body~~ and having a size and shape complementary to ~~an~~ said outer, upper shoulder ~~of the circumferential collar of the dental implant squeezed by the press fit mechanism~~.

3. (currently amended) ~~An impression cap~~ The combination according to claim 2, the press fit mechanism comprising a circumferential flange extending downwardly toward said second end and from the body, the flange ~~having an inner squeezing~~ comprising said internal surface ~~wherein the inner squeezing surface squeezes the collar at is maximum diameter when the~~ and said inner circumferential angled surface, said angled surface being ~~is~~ mated to the upper shoulder of the implant when the impression cap and the dental implant are in said press fit connection.

4. (currently amended) ~~An impression cap~~ The combination according to claim 3, the press fit mechanism further comprising a curved relief between the inner circumferential angled surface and the ~~inner squeezing~~ internal surface, said relief forming a gap between the impression cap and the implant when the impression cap is positioned on the implant.

5. (currently amended) ~~An impression cap~~ The combination according to claim 3, the flange further comprising a tapered surface, said tapered surface extending downwardly from the ~~squeezing~~ internal surface and away from the implant.

6. (cancelled)

7. (currently amended) ~~An impression cap~~ The combination according to claim 3, the flange having a bottom end corresponding to said second end, the flange further comprising an outer angled surface, the outer angled surface extending downwardly and inwardly to the bottom end of the flange.

8. (cancelled)

9. (currently amended) ~~An impression cap~~ The combination according to claim 3, the body having an inner surface wall, said inner circumferential angled surface angling outwardly from the inner surface wall, wherein a channel is formed in the inner circumferential angled surface, such that a vent from the cavity to the outside is formed when the impression cap and the dental implant are in said press fit connection.

10. (currently amended) ~~An impression cap~~ The combination according to claim 9, wherein there are at least two channels formed in the inner circumferential angled surface.

11. (cancelled)

12. (cancelled)

13. (currently amended) ~~An impression cap~~ The combination according to claim 1, the impression cap having a one-way vent positioned at the first end of the cap.

14. (cancelled)

15. (cancelled)

16. (currently amended) ~~An impression cap~~ The combination according to claim 3 wherein the dental implant includes an implant table, the impression cap being elastic, wherein, while press fitting the impression cap on the implant, the combination of the impression cap elastic material expanding during engagement of the implant outer collar diameter and the bottoming out of the impression cap on the implant table provides a tactile feel to a clinician that the impression cap is fully assembled to and self-centered on the implant.

17. (cancelled)

18. (currently amended) ~~An impression cap~~ The combination according to claim 3, wherein the impression cap is color coded to denote abutment length and implant collar diameter and correspond to the appropriate color coded abutment and abutment analog.

19. (currently amended) ~~An impression cap~~ The combination according to claim 1, wherein the body comprises: a side wall having an outer surface; and at least one circumferential rib protruding outward from the outer surface of the side wall.

20. (currently amended) ~~An impression cap~~ The combination according to claim 19, the body comprising two circumferential ribs protruding outward from the outer surface of the side wall, wherein the two circumferential ribs are spaced apart along the longitudinal axis of the body.

21. (currently amended) ~~An impression cap~~ The combination according to claim 20, at least one of the circumferential ribs having a flat surface which serves as an external abutment feature during an impression procedure enabling proper positioning of an abutment analog to reproduce a abutment orientation and implant position.

22. (currently amended) ~~An impression cap~~ The combination according to claim 20, wherein the circumferential ribs comprise at least one concave surface around their periphery.

23. (currently amended) ~~An impression cap~~ The combination according to claim 19, further comprising a first vertical rib protruding outward from the outer surface of the side wall and extending from the first end of the body to the second end.

24. (currently amended) A combination of an impression cap and a dental implant comprising:

a dental implant having an outer circumferential collar; and

an impression cap comprising:

an elongated body having a longitudinal axis, a first end and a second end, at least the second end being provided with an opening, the opening extending longitudinally into the body

from the second end forming ~~a~~ an inner cavity, the body further comprising a side wall having an outer surface and two circumferential ribs protruding outward from the outer surface of the side wall, wherein the two circumferential ribs are spaced apart along the longitudinal axis of the cap and wherein at least one of the circumferential ribs has a flat surface which serves as an external abutment feature during an impression procedure enabling proper positioning of an abutment analog to reproduce ~~a~~ an abutment orientation and implant position;

a press fit mechanism formed in the second end of the body, for squeezing against said outer circumferential collar of said dental implant, said circumferential collar having an outer diameter and said dental implant having a longitudinal axis, a top and a bottom, wherein the press fit mechanism squeezes against the collar of the dental implant via a press fit, such that, when the press fit mechanism squeezes against the collar, the portions of the press fit mechanism which are at or below the outer diameter of the collar have an inner diameter which is equal to or greater than the outer diameter of the collar; and

a first vertical rib protruding outward from the outer surface of the side wall and extending from the first end of the body to the second end.

25. (currently amended) ~~An impression cap~~ The combination according to claim 23, further comprising a second vertical rib, wherein the vertical ribs are spaced 180 degrees apart from one another around the periphery of the cap.

26. (currently amended) ~~An impression cap~~ The combination according to claim 24, further comprising a second vertical rib, the first vertical rib being aligned with the flat surface on the at least one circumferential rib.

27. (cancelled)

28. (cancelled)

29. (cancelled)

30. (cancelled)

31. (cancelled)

32. (cancelled)

33. (cancelled)

34. (cancelled)

35. (previously presented) A combination of an impression cap and a dental implant comprising:

a dental implant having an outer circumferential collar; and

an impression cap comprising:

an elongated body having a longitudinal axis, a first end and a second end, at least the second end being provided with an opening, the opening extending longitudinally into the body from the second end forming an inner cavity, the body further comprising a side wall having an outer surface; and at least one circumferential rib protruding outward from the outer surface of the side wall;

a press fit mechanism formed in the second end of the body, for squeezing against said outer circumferential collar of said dental implant, said circumferential collar having an outer diameter and said dental implant having a longitudinal axis, a top and a bottom, wherein the press fit mechanism squeezes against the collar of the dental implant via a press fit, such that, when the press fit mechanism squeezes against the collar, the portions of the press fit mechanism which are at or below the outer diameter of the collar have an inner diameter which is equal to or greater than the outer diameter of the collar;

a first vertical rib protruding outward from the outer surface of the side wall and extending from the first end of the cap to the second end and a second vertical rib, wherein the first and second vertical ribs are spaced 180 degrees apart from one another around the periphery of the cap; and

an inner cavity, wherein the inner cavity of the impression cap has an inner geometry which comprises an internal abutment flat and has a size and shape complementary to

an abutment piece which may be secured in the implant, the first vertical rib being aligned with the internal abutment flat, the first and second vertical ribs having a width and a depth, wherein the width of the first vertical rib is greater than the width of the second vertical rib substantially along their lengths.

36. (cancelled)

37. (currently amended) ~~An impression cap~~ The combination according to claim 35, wherein the second vertical rib extends from the first end of the cap to the second end and thickens at ~~its~~ the second end.

38. (cancelled)

39. (cancelled)

40. (currently amended) ~~An impression cap~~ The combination according to claim 39, wherein the first and second vertical ribs are each aligned with a corresponding one of the first and second channels.

41. (currently amended) ~~An impression cap~~ The combination according to claim 35, wherein the internal abutment flat comprises an abutment surface facing inward, the abutment surface comprising a bulge extending inward.

42. (cancelled)

43. (previously presented) A combination of an impression cap and a dental implant comprising:

a dental implant having an outer circumferential collar; and

an impression cap comprising:

an elongated, generally conical body having a longitudinal axis, a first end and a second end, at least the second end being provided with an opening, the opening extending

longitudinally into the body from the second end forming a inner cavity wherein the inner cavity of the impression cap has an inner geometry which comprises an internal abutment flat and has a size and shape complementary to an abutment piece which may be secured in the implant and wherein the internal abutment flat comprises an abutment surface facing inward, the abutment surface comprising a bulge extending inward; and

a press fit mechanism formed in the second end of the body, for squeezing against said outer circumferential collar of said dental implant, said circumferential collar having an outer diameter and said dental implant having a longitudinal axis, a top and a bottom, wherein the press fit mechanism squeezes against the collar of the dental implant via a press fit, such that, when the press fit mechanism squeezes against the collar, the portions of the press fit mechanism which are at or below the outer diameter of the collar have an inner diameter which is equal to or greater than the outer diameter of the collar.

44. (cancelled)

45. (cancelled)

46. (currently amended) An impression cap comprising:

a cylinder shaped body having a longitudinal axis, a first end and a second end wherein ~~the~~ said first end ~~of the cap~~ is substantially closed forming a top and at least the second end being provided with an opening to engage an abutment piece, the opening extending longitudinally into the body from the second end forming an inner cavity, the cylinder shaped body further having an inner surface and an outer surface, the impression cap further comprising a first groove formed in the inner surface adjacent the second end, such that, when the impression cap is placed over the abutment piece, air is vented between the first groove and the abutment piece; and

a one-way vent formed in ~~the~~ said top ~~of the cap~~.

47. (currently amended) An impression cap according to claim [44] 46, further comprising a second groove formed in the inner surface adjacent the second end, such that, when the impression cap is placed over the abutment piece, air is vented between the second groove and the abutment piece.

48. (previously presented) An impression cap according to claim 47, wherein the first and second grooves are positioned in the inner surface in opposing fashion.

49. (cancelled)

50. (cancelled)

51. (cancelled)

52. (previously presented) An impression cap for a dental impression system comprising:

an elongated body having a longitudinal axis, a first end and a second end, at least the second end being provided with an opening to engage an abutment piece, the opening extending longitudinally into the body from the second end forming an inner cavity, the elongated body further having an inner surface and an outer surface, an abutment flat formed in the inner surface and a bulge formed on the abutment flat which extends inward to create a press fit when the cap is placed over an abutment piece, the impression further comprising a first groove formed in the inner surface adjacent the second end, such that, when the impression cap is placed over the abutment piece, air is vented between the first groove and the abutment piece.

53. (currently amended) An impression cap according to claim [44] 46, further comprising a press fit mechanism formed in the second end of the body, for squeezing an outer circumferential collar of a dental implant, said circumferential collar having an outer diameter and said dental implant having a longitudinal axis, a top and a bottom, wherein the press fit mechanism squeezes the collar of the dental implant via a press fit, such that, when the press fit mechanism squeezes the collar, the portions of the press fit mechanism which are at or below the outer diameter of the collar have an inner diameter which equal to or greater than the outer diameter of the collar.

54. (cancelled)

55. (cancelled)

56. (cancelled)

57. (cancelled)

58. (cancelled)

59. (previously presented) An impression cap for a dental impression system, comprising:

an elongated body having a longitudinal axis, a first end and a second end, at least the second end being provided with an opening to engage an abutment piece, the opening extending longitudinally into the body from the second end forming an inner cavity, the elongated body further having an inner surface and an outer surface, the impression further comprising a first groove formed in the inner surface adjacent the second end, such that, when the impression cap is placed over the abutment piece, air is vented between the first groove and the abutment piece and a second groove formed in the inner surface adjacent the second end, such that, when the impression cap is placed over the abutment piece, air is vented between the second groove and the abutment piece, the impression cap further comprising a first vertical rib protruding outward from the outer surface of the side wall and extending from the first end of the cap to the second end and a second vertical rib, wherein the vertical ribs are spaced apart from one another around the periphery of the cap, wherein the inner cavity of the impression cap has an inner geometry which comprises an internal abutment flat and has a size and shape complementary to an abutment piece which may be secured in the implant, the first vertical rib being aligned with the internal abutment flat, the vertical ribs having a width and a depth, wherein the width of the first vertical rib is greater than the width of the second vertical rib substantially along their lengths.

60. (original) An impression cap according to claim 59, wherein the two vertical ribs are aligned with the grooves.

61. (cancelled)

62. (cancelled)

63. (cancelled)

64. (previously presented) An impression cap for a dental impression system, comprising:

an elongated body having a longitudinal axis, a first end and a second end at least the second end being provided with an opening to engage an abutment piece, the opening extending longitudinally into the body from the second end forming an inner cavity, the elongated body further having an inner surface and an outer surface, the impression cap further comprising an abutment flat formed in the inner surface and a bulge formed on the abutment flat which extends inward to create a press fit when the cap is placed over an abutment piece, the impression cap further comprising a first groove formed in the inner surface adjacent the second end, such that, when the impression cap is placed over the abutment piece, air is vented between the first groove and the abutment piece.

65. (currently amended) An impression cap according to claim ~~62~~ 64, wherein ~~the~~ said first end ~~of the cap~~ is substantially closed forming a top.

66. (previously presented) An impression cap for a dental impression system, comprising:

an elongated body having a longitudinal axis, a first end and a second end, the first end of the cap being substantially closed forming a top and at least the second end being provided with an opening to engage an abutment piece, the opening extending longitudinally into the body from the second end forming a inner cavity, the elongated body further having an inner surface and an outer surface, the impression cap further comprising an abutment flat formed in the inner surface, a bulge formed on the abutment flat which extends inward to create a press fit when the cap is placed over an abutment piece and

a one-way vent formed in the top of the cap.

67. (cancelled)

68. (currently amended) An impression cap according to claim [44] 46, wherein the cylinder-shaped body has a generally conical inner cavity.

69. (currently amended) An impression cap according to claim ~~62~~ 64, further comprising a press fit mechanism formed in the second end of the body, for squeezing an outer circumferential collar of a dental implant, said circumferential collar having an outer diameter and said dental implant having a longitudinal axis, a top and a bottom, wherein the press fit mechanism squeezes the collar of the dental implant via a press fit, such that, when the press fit mechanism squeezes the collar, the portions of the press fit mechanism which are at or below the outer diameter of the collar have an inner diameter which equal to or greater than the outer diameter of the collar.

70. (cancelled)

71. (cancelled)

72. (cancelled)

73. (cancelled)

74. (cancelled)

75. (cancelled)

76. (cancelled)

77. (cancelled)

78. (cancelled)

79. (cancelled)

80. (currently amended) An impression cap for a dental impression system, comprising:

a cylinder shaped body having a longitudinal axis, a first end and a second end, at least the second end being provided with an opening, the opening extending longitudinally into the body from the second end forming an inner cavity, the cylinder shaped body further having an inner surface and an outer surface, the impression cap further comprising an abutment flat formed in the inner surface and an external geometry formed on the outer surface, the body comprising two circumferential ribs protruding outward from the outer surface of the side wall, wherein the two circumferential ribs are spaced apart along ~~the~~ said longitudinal axis, ~~of he cap,~~ the impression cap further comprising a first vertical rib protruding outward from the outer surface of the side wall and extending from ~~the~~ said first end ~~of the cap~~ to the second end.

81. (original) An impression cap according to claim 80, further comprising a second vertical rib, wherein the vertical ribs are spaced apart from one another around the periphery of the cap.

82. (previously presented) An impression cap according to claim 81, the first vertical rib being aligned with the internal abutment flat, the vertical ribs having a width and a depth, wherein the width of the first vertical rib is greater than the width of the second vertical rib substantially along their lengths.

83. (cancelled)

84. (cancelled)

85. (cancelled)

86. (cancelled)

87. (cancelled)

88. (cancelled)

89. (cancelled)